

## Akai Portable Video Tape Recorders

### Akai VT 100, Akai VT 110 DX, Akai VT 150

The **Akai VT 100** was a black and white portable video system which used 5" tape. Introduced around 1969, the machine could record video using normal audio tape, although the quality was improved when using the Akai's special quarter-inch videotape.



From Product Literature

Model VTS-100S is superbly engineered with convenient control panel, Still Button, Index Counter and Automatic Shut-Off. Model VTS-110DX adds off-the-air recording capability and sound dubbing.

Akai VTR systems are truly portable. Zoom lens camera with built-in microphone, recorder and attached 3" TV monitor weigh less than 20 lbs. Record and playback up to 30 minutes on a single 5" reel of inexpensive and reusable 5" tape. Battery or AC operated. Optional RF converter permits playback on any TV set.

## Akai Portable Video Tape Recorders



VT1000

### SPECS

**VT1000 - VT100**

TV Signal	USA Standard TV signal
Scanning System	Twin rotating heads, sequential modulation system
Tape Speed	11 1/2 in
Tape Width	1/4"
Reel Capacity	17' reel
Resolution	More than 200 lines
Video S/N Ratio	Better than 40dB
Audio Frequency Bandwidth	100 to 10,000Hz
Dimensions	RECORDER: 10" W x 4.4" H x 10.3" D MONITOR: 3.8" W x 4.4" H x 10.3" D
Weight	RECORDER: 11 lbs. MONITOR: 3.5 lbs.

**Choose from two models...**

Model VT1000 is specially engineered with advanced beam split, 500 Lines (1/2" Dia) and Automatic Shutter. Model VT1000 also offers an recording capability and sound mixing.

AKAI VTR systems are truly portable. These are compact with built-in microphone, recorder and standard 1/4" VTR mounts weigh less than 20 lbs. Record and playback up to 30 minutes on a single 17' reel of tape and available 1/4" tape. Battery or AC powered. Optional RF Converter permits playback on any TV set.



## Specifications

VT

Akai 1/4" VT100 USA Standard TV signal

Format type: analog

Scanning system: twin rotating heads, half wrap helical scan

Year introduced: around 1969

Tape width: 1/4"

Tape speed: 11 1/2" per second

Reel size: 5" reel

Resolution: More than 200 lines

Video S/N ratio: better than 40dB

Audio Frequency bandwidth: 100 to 10,000Hz

## Dimensions:

Recorder 10" W x 4.4" H x 10.3" D

Monitor 3.8" W x 4.4" H x 10.3" D

## Weight :

Recorder 11 lbs.

Monitor 3.5 lbs.

## **VTS-110 DX**

Portable 1/4" video tape recorder, using a single crystal ferrite head. The head motor is a DC servo-motor for better picture stability. Stationary full track erase, control/audio, and side track erase heads. A high performing brushless micro-motor for capstan drive provides constant speed and further reduces wow and flutter. The ruggedness of this wear-free motor matches the ability of the other components in withstanding intense climatic conditions.

## **Akai VT150 Color Video Tape Recording System**



### Technical Data Sheet for AKAI VT150 Color Video Tape Recording System

Lightweight VTR features Automatic Editing Control. Stop Motion (with jeoped monitor), Sound Dubbing, Two-Head Helical Scan recording format, Multi-purpose camera features Servo-Controlled Automatic Iris, Wide-Angle to Telephoto Lens with 6-to-1 Zoom, 300-Line Resolution. Complete system weighs just 22 pounds, including batteries. Records and plays back 26 minutes per reel, but battery-powered system will record up to 40 minutes without recharging. Full-color E" tape replays on any EIAJ TV monitor or, with RF converter accessory, on any home television set!

#### Color Camera Unit Technical Data

Color System: NTSC type frequency multiplex system, fully locked chroma

Vidicon Tube:

Luminance channel: 2/3" electrostatic focusing, electromagnetic deflection type vidicon;

Chrominance channel: Akai color dissector tube.

View Finder: 1.5" type built-in electronic viewfinder

Lens: 6X (12.5 to 75mm) zoom lens, F2 to closed

Aperture: Automatic and manual iris systems

Scanning System: 525 lines, 2:1 interlace

#### Synchronizing System:

External synchronization system from CCU-150. (May be externally driven)

Horizontal Resolution: More than 300 lines

Signal to Noise Ratio: Better than 40dB

White Balance: White Balance Switch

Ideal Subject Lighting Density:

140 foot candles (minimum Subject Lighting Density: 60 foot candles using a 500W Halogen type lamp at 2m)

Automatic Sensitivity Control Range:

60 to 2000 foot candles

(ND-4 standard accessory: 240 to 8000;

ND-8 optional accessory: 480 to 16000)

Microphone: 600 ohms uni-directional microphone

Power Requirements: DC 12V supplied from CCU-150

Dimensions: 3.5 x 9.3 x 13.2" including lens hood and grip handle

Weight: 5.76 pounds including eye-hood assembly

#### CCU-150

Video Signal Output: NTSC Type Color TV Signal 1 Vp-p 75 ohms

Audio Signal Output: 0.1 VRMS

RF Converter Output:

Video: NTSC type 1 Vp-p 75 ohms

Audio: 1 VRMS

Power Requirements: 120V AC, 60 Hz

Power Consumption: 50W

Dimensions: 10.2" x 4" x 9.1"

Weight: 8 lbs.

#### VT-150 Color VTR Unit

Recording Format: Two Head Helical Scan

Video Signal: NTSC Type Color

Tape Speed: 10 inches per second

Recording Time: 26 minutes using 5" reel

Tape Width: 1/2"

Resolution: More than 230 lines

Video Signal to Noise Ratio: Better than 40dB

Audio Frequency Range: 100 to 10000 Hz

Audio Signal to Noise Ratio: Better than 45dB

Video Input: 1 Volt Peak to Peak

Audio Input: 0.1 Volt

Video Output: 1 Volt Peak to Peak

Audio Output: 1 Volt

Dimensions: 10.45"W x 5.6 H x 14.2 D

Weight: 16.4 lbs (with batteries)

Battery Using Time: 40 minutes

Power Consumption: 32 Watts